

Water-Data Report NV-2005

385333118461601 Local number 110A N12 E29 20BBC 1

Basin and Range basin-fill aquifers

Mineral County, NV

LOCATION.--Lat 38°53'32.6", long 118°46'15.9" referenced to North American Datum of 1983, in SW ¼ NW ¼ NW ¼ sec.20, T.12 N., R.29 E., Mineral County, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 44 ft. Upper casing diameter 2 in; top of first opening 34 ft, bottom of last opening 44 ft.

WELL USE .-- Observation well.

DATUM.--Land-surface datum is 4065 ft above National Geodetic Vertical Datum of 1929. Measuring point: Land surface datum, 0.0 ft above land-surface datum.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

[Measurement method: T, electric tape; S, steel tape. Water-level status: - - , static.]

| Date | Water level | Measurement method | Water level status |
|-------------|----------------|-----------------------|--------------------|
| Apr 5, 2005 | 29.55 | T | |
| 21 | 29.52 | S | |
| May 11 | 29.68 | S | |
| Jul 12 | 30.09 | S | |
| Aug 15 | 30.75 | T | |
| 17 | 30.36 | T | |
| Sep 27 | 29.98 | S | |

Highest: 29.52 Apr 21, 2005 Lowest: 30.75 Aug 15, 2005